

DOCUMENT RESUME

ED 123 602

CS 002 688

AUTHOR Dishner, Ernest K.
 TITLE The Cloze Procedure: A Valuable Tool for Content Teachers.
 PUB DATE 73
 NOTE 8p.; Paper presented at the Annual Meeting of the 1973 National Reading Conference

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
 DESCRIPTORS *Cloze Procedure; *Content Reading; Elementary Secondary Education; Instructional Materials; Measurement Instruments; *Readability; Reading Ability; Reading Comprehension; Reading Skills; *Textbooks

ABSTRACT

The cloze procedure, a technique for determining the difficulty level of written material, involves the systematic deletion of words from a prose selection and the supplying of the missing words by a student or a group of students. The students' ability to supply these words is a significant indicator of how well they comprehend the written material. This procedure, which can be used by content area teachers to identify both those students who will profit most from the adopted textbook and those for whom the text is too difficult, involves test construction, administration, and scoring; classification of student performance; and interpretation of the results. This is best used with students who have at least fourth grade level reading skills. (JM)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

ED123602

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

Ernest K. Dishner
Assistant Professor
Reading Education
Arizona State University
Tempe, AZ 85281

PERMISSION TO REPRODUCE THIS COPY-
RIGHTED MATERIAL HAS BEEN GRANTED BY
Ernest K. Dishner

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER

THE CLOZE PROCEDURE:
A VALUABLE TOOL FOR CONTENT TEACHERS

Mid-year student evaluations are due in the principal's office tomorrow, and John Readence and Catherine Ann Phillips, U. S. History teachers at West High School, are discussing their students' performance to date.

"Half a year shot already, and I still can't seem to get through to these kids," John complains as he sips his third cup of coffee. "One-third of my last period class didn't even attempt their homework assignment last night."

Catherine cites similar problems in her class, then adds, "Why, just last week I discovered that five students in my sixth period class can't even read the textbook. Now I'm beginning to wonder how many other students are in the same boat."

Does this scene sound familiar? Unfortunately, conversations similar to this take place all too often in high schools throughout the country. For many instructors, it is mid-term or later before they discover which students in the class are having difficulty reading the text. Others discover too late that the reason some students do not attempt assignments is because they do not have sufficient reading skills to allow them to understand the author's ideas.

The purpose of this article is to present to the content area

002.688



teacher a simple, economical method of identifying those students who might have difficulty with the textbook. It is suggested that this technique be used during the first week of the school year so that instructional adjustments might be made for those students whose performance indicates possible difficulty with the text.

The technique, designed originally by Taylor (1953) as a means of determining the difficulty level of written material, is known as cloze. Very simply, the cloze procedure involves the systematic deletion of words from a prose selection. An individual or group of individuals then are asked to supply the missing words. The student's ability to supply the missing words is a significant indicator of how well he could comprehend the written material.

Robinson (1972) provides an excellent reference for the individual who wishes to delve more deeply into the twenty plus years of writings and research on the cloze technique. His annotated bibliography includes general references in addition to specific references on the methodology of cloze construction, the use of cloze as a measure of readability, and the use of cloze as a teaching technique.

The following suggestions are directed specifically to content area teachers or to reading teachers who serve as resource teachers for these subject matter instructors. The procedure outlined here is provided as a means of determining the ability of students to handle successfully the class text.

A Recipe for Cloze Testing

Constructing a Cloze Test.

1. Select passage. From the textbook adopted for your class,

select a prose passage of 250-350 words that might be considered "typical" of the reading level of the remainder of the book. The selection should not include material previously read by your students and should include complete paragraphs so that the students will have the benefit of complete thought units within the selection.

2. Identify words to be deleted. Lightly underline every fifth word in the selection. These will be words that will be deleted and that the students will need to supply on their test copies. It is recommended that you start your deletions in the second sentence of the selection and stop in the next to the last sentence. Deletions totaling at least 50 but not more than 70 are recommended.
3. Prepare a stencil. Type the selection, double-space format, on a stencil with blanks substituted for each of the words previously underlined. All blanks should be of equal length-- long enough to allow the students to write-in the longest deleted word. Usually twenty spaces are sufficient.

Administering a Cloze Test.

After making enough test copies to examine each student in your class, distribute one mimeographed passage to each student and stress the following points in your oral directions to the students.

1. Only one word should be written for each blank.
2. Students should try to fill in every blank on the mimeographed sheet; therefore, guesses are encouraged.

3. Incorrect spellings are not counted as errors; however, each supplied word should be recognizable.
4. Students should be advised to read through the entire test before attempting to replace the deletions.
5. A cloze test is not a timed test.

Scoring the Cloze Test:

In order to determine each student's raw score on the cloze test,

1. Count as correct only those words that are exact replacements of the deleted words. Synonyms are not counted as correct.
2. The only exception to the above rule occurs when it is obvious that the student misspelled the correct word. Since your goal is to determine how well he can read the text material and not to test his spelling ability, the student should not be penalized for his misspellings.
3. Inappropriate word endings (s, ed, er, ing) should be counted as incorrect. This usually indicates that the student is not aware of the complete meaning of the sentence.
4. The raw score for each student will be the number of exact word replacements.

Classifying Student Performance.

Although the results vary slightly from one research study to another, it generally has been found that students whose scores fall between 40% and 60% would profit most from the use of that particular piece of instructional material. Students scoring below 40% probably would find the material too difficult, while students scoring above the 60% level might find the text too easy. In order to make these decisions,

1. Multiply the number of words you deleted in your passage by ~~40%~~. This will provide the lower limit raw score for the instructional reading level.
2. Multiply the number of deleted words by 60% in order to establish the upper limit raw score.
3. After obtaining these lower and upper limits, place each student in the appropriate category based upon his raw score. Each student's performance on the cloze passage will indicate either (a) the material is too difficult; (b) the material is within the student's instructional reading level; or (c) the material is too easy for effective instructional purposes.

The following EXAMPLE should help to illustrate the above procedure.

$$\begin{array}{r} \text{Total words in passage} \quad 335 \\ \text{Number of words deleted} \quad \underline{60} \end{array}$$

1. 40% or .40

$$\begin{array}{r} \times 60 \\ \hline 24.00 \end{array}$$
 (Lower limit raw score for instructional reading level)

2. 60% or .60

$$\begin{array}{r} \times 60 \\ \hline 36.00 \end{array}$$
 (Upper limit raw score for instructional reading level)

3. For this example, the following table could be used to classify student performance:

- a. Raw score ≤ 23 = Material too difficult.
- b. Raw score = 24 through 36 = Instructional Reading Level
- c. Raw score ≥ 37 = Material too easy.

Interpreting the Results.

Caution is advised in interpreting the cloze test results. There is

nothing magical about the 40% - 60% range suggested earlier. That range does appear to be a valid compromise between the results of numerous research studies linking cloze test results with results of various other methods of determining instructional reading levels. Further, for those of us who lack "sophisticated" mathematical skills, the 40% - 60% range is much easier to calculate than, say, a range of 37% - 58%.

For these reasons, one should not conclude that a student scoring 39% on a cloze passage should not be instructed in that particular text. Likewise, students scoring 61% should not automatically be expected to be able to read higher level material. Rather, by using the cloze procedure for the purpose described in this article, a subject matter teacher could use the cloze test results to make the following decisions:

1. Students who score above 60% will certainly have no difficulty with this text; however, I will want to look for additional materials to supplement the text and to challenge these youngsters. Individual and group research projects would be good possibilities.
2. For those students scoring between 40% - 60% on the cloze test, I am sure that I have a good match between the difficulty level of the text and the reading abilities of these students. The text should challenge these youngsters without being too difficult.
3. Those students scoring below 40% will have difficulty working in the textbook. I can use the text with them, but I am going to have to do an especially good job of teaching. If I find after several units that they just cannot work in the text,

then I will need to be prepared to provide them with alternative methods of instruction.)

Summary

The proper matchup between the difficulty level of instructional materials and the reading level of students is extremely important if maximum instructional benefits are to be realized. This writer has attempted to outline a procedure that might be used by subject matter teachers to help identify those students in a given class who will profit most from the use of the adopted textbook. The technique also identifies those students for which the text may be too easy as well as those youngsters for which the text is too difficult.

Best used with students who have at least fourth grade level reading skills, the cloze technique is a simple, economical tool for the content teacher. When used at the beginning of the academic year, a cloze test designed on a short passage from the class text should provide the subject matter teacher with valuable initial information on his/her students' abilities to profit from the text.

References

- Robinson, R. D: Introduction to the Cloze Procedure. Newark, Delaware: International Reading Association, 1972.
- Taylor, W. S. Cloze procedure: A new test for measuring readability, Journalism Quarterly, 30 (Fall 1953), 415-493.